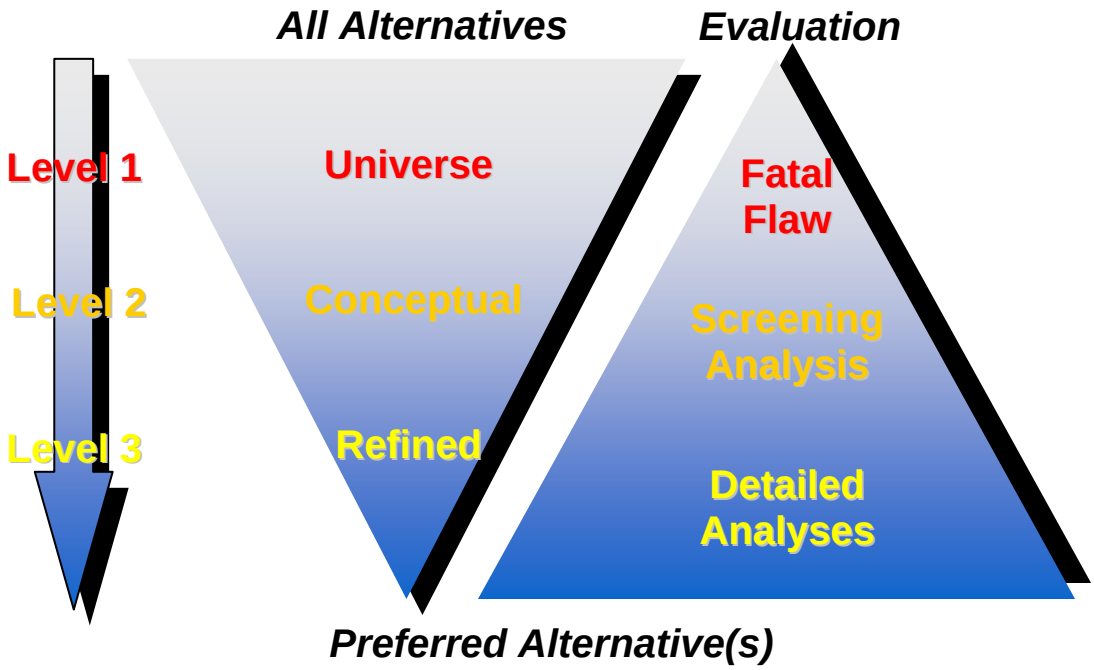
10.0 EVALUATION METHODOLOGY

The evaluation procedure used in this study is a three-step process. The purpose of the three-step process is to refine the list of alternatives (corridors) from all possible alternatives, to a short list of promising alternatives, and then finally to a recommended alternative. The evaluation process uses increasingly detailed analysis methods to complete the screening and to refine the alternatives remaining after each round of analysis. The goal is to study and further develop only feasible alternatives that best meet the project's goals, while not spending extensive effort on those that are unworkable or do not meet the project's goals.

Initially, a few important details were identified for a broad array of possible alternatives. As the analysis progressed, the range and depth of information increased and the number of alternatives being studied decreased as shown in **Figure 14.**

Figure 14: Three-Level Evaluation Process



During Level 1, much of the analysis was based on qualitative or comparative information. The principal goals at this level were to determine if an alternative was feasible (physically, financially, environmentally and socio-politically) and generally how it compared to the other alternatives. During the next two levels, the amount of qualitative data and analysis increased substantially (i.e. traffic forecasts, cost estimates, potential numbers of impacted wetlands, etc.) allowing for more detailed and definitive comparisons. The goal of the final Level 3 analysis was to select a recommendation. The following three report sections present a summary of each of the three analysis levels.

11.0 LEVEL 1 EVALUATION – INITIAL SCREENING

The initial screening process began with the map of corridors drawn by attendees at the November 20, 2007 Public Meeting. On January 16, 2008, the Project Development Team (PDT) met to review all of the corridors drawn by the public and to find common points throughout the study area where people wanted to see a connecter. This procedure enabled the group to decide on a set of 2,000 foot wide corridors to be further evaluated. Some criteria used by the PDT in addition to common points are noted below.

- Lines drawn outside the three county study area boundary were eliminated from consideration.
- Corridors in the southernmost study area toward Richmond were eliminated as there is not much traffic / transportation utility for them.
- Corridors with an eastern termini south of Richmond were eliminated. The *Scoping Study for US 27/I-75 Connector in Garrard and Madison Counties* discussed in Chapter 4 addresses connectivity issues associated with this portion of Madison County.
- Due to cost, corridors that crossed the river more than once were removed.
- Corridors through 'listed' properties were removed.
- The northernmost corridors were removed due to known developments, including PDR sites.
- Diagonal routes were eliminated due to the length, which would drive up the costs and decrease travel time savings and utility.
- Common intersection points were noted. These areas were shaded on the wall map. Corridors drawn by the PDT included all these points.

Based on these criteria, a total of eighteen corridors were retained for further analysis in Level 2. **Figure 15** shows these eighteen corridors. In addition to the eighteen corridors, a no-build scenario was included as a baseline for comparison as well as a viable alternative.